

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2003-063958

(43)Date of publication of application : 05.03.2003

(51)Int.Cl.

A61K 31/198
A23L 1/305
A61P 25/24

(21)Application number : 2001-253740

(71)Applicant : TAIYO KAGAKU CO LTD

(22)Date of filing : 24.08.2001

(72)Inventor : KOSEKI MAKOTO

OKUBO TSUTOMU

REKA RAJU JUNEJA

YAMAZAKI NAGAHIRO

(54) COMPOSITION FOR TREATING ILL FEELING

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a composition for treating ill feeling which is highly effective for the prevention of depression and has no side effects.

SOLUTION: The composition contains teanine, a kind of amino acid contained in green tea. As a production method of teanine, any of the method such as extraction from tea leaves, organic synthesis or, the promotion of proliferation of cultured tea leaves can be used. Green tea, oolong tea, black tea and the like can be cited as the tea leaf.

LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

*** NOTICES ***

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

DETAILED DESCRIPTION

[Detailed Description of the Invention]**[0001]**

[Field of the Invention] This invention relates to the food containing the constituent for a mood disorders therapy and this constituent which are characterized by containing a theanine, drugs, and a pan at those manufacture approaches.

[0002]

[Description of the Prior Art] Although there were a mold (bipolar type) in which both a manic state and a depressed state are shown, and a mold (acyclic type) in which only a depressed state is shown in the moral disease conventionally called "manic-depressive psychosis", it collects as "mood disorders" now as a name which names these two molds generically, and came to be called. In the result of the epidemiological survey in the latest European and American advanced nations, it is said that the prevalence rate of the depression occupied to general population in mood disorders thru/or a depression condition is increasing certainly. with arrival of an aging society, the prevalence rate exceeds 10% especially -- until -- it says. Clearly, although the break through is not carried out, as for the cause of mood disorders, "work of the monoamine within a brain runs short" is still mentioned as the assumption. From this, the medicine which acts on work of the monoamine within a brain is used for the therapy of the depression in mood disorders.

[0003] There is MAO inhibitor in the medicine in which an anti-**** operation is shown. MAO is the abbreviation for a monoamine oxidase and is an enzyme which makes the activity of a chemical transmitter lose by oxidizing the chemical transmitter of monoamine including norepinephrine, serotonin, dopamine, etc. Although there are the iproniazid, pheniprazine, fennel gin, NIARAMIN, iso carboxy azide, safrazine, etc. as MAO inhibitor, in current, all MAO inhibitor is [the limit on activities, such as the danger of critical side effects such as a hepatopathy, and concomitant use with a tricyclic antidepressant, and a problem of a high tyramine content ingestion limit, / many / a sale termination].

[0004] Moreover, the antidepressant of a 3 ring system is often used as an antidepressant. As a typical medicine, there are imipramine hydrochloride (trade name: Tofranil), clomipramine hydrochloride (trade name: Anafranil), hydrochloric-acid friend TORIPUCHIN (trade name: Tryptanol), desipramine hydrochloride (trade name: PERT furan), amoxapine (trade name: Amoxan), lofepramine hydrochloride (trade name: Amplit), etc.

[0005] The action mechanism of the antidepressant of a 3 ring system is an operation which controls re-incorporation of the monoamine emitted from a nerve-fiber terminal part. As drugs with the strong effectiveness which controls re-incorporation of the norepinephrine which is monoamine, it is the desipramine hydrochloride and amoxapine and a hydrochloric-acid KUROMI plan is mentioned as strong drugs of the effectiveness which controls re-incorporation of serotonin. It is supposed that hydrochloric-acid friend pro MICHIN and imipramine hydrochloride are worked in-between as re-incorporation control of norepinephrine and serotonin.

[0006] Furthermore, the tetracyclic antidepressant was developed as a medicine with few side effects of a tricyclic antidepressant. There are maprotiline hydrochloride (trade name: Ludiomil), mianserin

hydrochloride (trade name: Tetramide), maleic-acid ASEPUCHIRIN (trade name: Tecipul), etc. as a typical medicine. The operation of a tetracyclic antidepressant is made main [the effectiveness of promoting bleedoff of monoamine from the nerve-fiber terminal part]. A tetracyclic antidepressant has the effectiveness which intercepts α_2 receptor, therefore it is supposed that the burst size of monoamine increases it.

[0007] The side effect is known by the 3 ring system and the 4 ***** remedy. An anticholinergic drug symptom is mentioned to one of them. It is known by work of the acetylcholine which is the chemical transmitter of the parasympathetic nerve that a 3 ring system and a 4 ring system remedy will rival. As a concrete symptom of a side effect, there are alimentary canal control of increased intraocular pressure, such as the diffused light, thirst, constipation, etc., dysuria, etc. Moreover, also considering sleepiness as a side effect to ***** and the circulatory system, orthostatic hypotension is also known from central-nerves depressant action besides the anticholinergic drug symptom. Although there are few side effects of the antidepressant of a 4 ring system compared with a 3 ring system, it is said that effectiveness is weak.

[0008] Compared with the antidepressant of a 3 ring system or a 4 ring system, a remedy called SSRI (selective serotonin reuptake inhibitors) is in an antidepressant with few side effects. SSRI has the description that the selectivity over re-incorporation of serotonin is high among the monoamines emitted from the synaptic ending section. There is fluvoxamine maleate (trade name: Depromel, Luvox) as a typical medicine, and although it is few compared with the antidepressant of a 3 ring system or a 4 ring system as the side effect, digestive diseases, such as nausea and vomiting, are mentioned to the time of recipe. moreover, the terfenadine (trade name: out tolyl) of MAO inhibitor and an antiallergic agent and astemizole (trade name: hysterics MANARU) -- the concomitant use with the cisapride (trade name: Acenalin, Risamol) of a mechanical-factors-in-digestion improvement agent serves as contraindication further.

[0009] Moreover, it is mentioned that the point common to an antidepressant has the slow manifestation of effectiveness. It is known that lipophilicity is high and a binding fraction with plasma protein is high, and the antidepressant is said for the manifestation of immediate effect nature and effectiveness to be slow. Therefore, it is thought under a certain effect brought about by continuous stimulus that effectiveness is discovered. Moreover, bringing about lowering of the number of receptors is also reported by the continuous stimulus of the emitted monoamine.

[0010]

[Problem(s) to be Solved by the Invention] This invention offers the constituent for a mood disorders therapy which solved the above-mentioned problem. The constituent for a mood disorders therapy with few side effects is offered in more detail.

[0011]

[Means for Solving the Problem] this invention persons found out that a kind of the amino acid that in green tea contained and a theanine were effective in solution of the above-mentioned technical problem as a result of examining the matter which has effectiveness in a mood disorders therapy, and completed this invention. [many] The above-mentioned effectiveness of a theanine is the new effectiveness which this invention persons found out for the first time. Hereafter, this invention is explained in full detail.

[0012]

[Embodiment of the Invention] The mood disorders in this invention is shown in the 10th edition of International Classification of Disease of WHO, and is a symptom indicating the modulation of tempers, such as depression or an upsurge. The fundamental failure in mood disorders, "it is change of a temper or feeling, and it changes to depression or usually changes to an upsurge. With a usually general active change, or many of other symptoms would not arise from that change secondarily, he can understand change of this temper easily from relevance with that. It is defined as ". That is, there are two symptoms, the mold (hyperbolic direction) to which both a manic state and a depressed state are indicated to be mood disorders, and the mold (acyclic type) in which only a depressed state is shown. The theanine of this invention improves the condition of depression among mood disorders.

[0013] As a symptom seen by the patient of a depressed state, loss of a depression temper, interest, and

joy, buildup of the feeling of ***** by decline of the vital force and an active reduction, and also after doing one's best, a pessimistic view without the hope to decline of concentration and attentiveness, lowering of self-valuation and self, a guilt feeling, a worthless feeling, and the future which senses the fatigue severe, a self-blemish or the idea of suicide and an act, a somnopathy, anorexia, etc. are mentioned. Moreover, in order to decide a diagnosis according to diagnostic guideline ICD-10 Loss of a depression temper, interest, and joy and a feeling of ***** further at least two Decline of concentration and attentiveness, It is supposed that at least two [two weeks or more] of the symptoms of a pessimistic view without the hope to self-valuation, own lowering and a guilt feeling, a worthless feeling, and the future, a self-blemish or the idea of suicide and an act, a somnopathy, and anorexia must exist.

[0014] The symptom shot in a woman is accepted frequently. Although a depression temper is also before menstruation and in menstruation, the symptom accompanying menstruation to shoot is removed from the above-mentioned diagnostic guideline. The theanine used for this invention is the glutamic-acid derivative contained in the tea leaf, and it is the principal component of a brown taste and is used as a food additive which makes taste an application. As a manufacturing method of the theanine used for this invention The approach of extracting from tea leaves, the method of carrying out an organic synthesis reaction and obtaining a theanine (Chem.Pharm.Bull., 19(7)1301-1307 (1971)), How (JP,7-55154,B) to make glutaminase act on a glutamine and the mixture of ethylamine, and to obtain a theanine, How (JP,5-123166,A) to aim at acceleration of growth of a culture cell population, cultivating a brown culture cell population by the culture medium containing ethylamine, and making the theanine accumulated dose in a culture cell population increase. Moreover, there may be JP,7-55154,B, a method of transposing the ethylamine in the extraction of the square root No. 123166 [five to] to ethylamine derivatives, such as an ethylamine hydrochloride, and obtaining a theanine, the approach of extracting from tea leaves, etc., and which approach may be used. Green tea, oolong tea, tea, etc. are raised with tea leaves here. the theanine obtained by such approach -- L-object, D-object, and DL-object -- although all are usable, since L-object is accepted also in the food additive object and it is easy to use also economically especially, in this invention, L-object is desirable.

[0015] The mechanism of the anti-**** effectiveness of a theanine is not known. Passing through a brain gateway by administering a theanine orally in the animal trial using a rat is known, and it is thought from affecting the moving state of serotonin or norepinephrine by accepting the increment in the dopamine within a brain, or prescribing a theanine for the patient by prescribing a theanine for the patient directly into a brain as an operation of a theanine that it is because a certain operation is brought about in a brain.

[0016] The safety of the theanine used for this invention is high, for example, there is no example of death in the acute toxicity test using a mouse at 5 g/kg internal use, and abnormalities are not accepted in general status, weight, etc. Moreover, especially L-theanine is known as a brown ***** component, and is used also as a food additive which makes taste an application, and there is no limit on Food Sanitation Law in the addition. And since the side effect by the theanine is not accepted at all unlike the conventional drug, according to the constituent of this invention, the therapy of mood disorders can be aimed at on insurance and an effectiveness target.

[0017] Moreover, the theanine used for this invention is good with a refined material, a crude product, an extract extract, etc. at any configuration. The constituent for a mood disorders therapy which is this invention article points out food, such as liquefied food, such as a dried food which contains remaining as it is or a theanine for a theanine, a supplement and a soft drink, mineral water and a taste drink, and an alcoholic beverage, a tablet, a capsule, powders, a granule, and drinkable preparations, and drugs.

[0018] Especially as a drink mentioned here, although not limited, tea, such as green tea, oolong tea, tea, and herb tea, concentrated juice, concentration reduction juice, straight juice, fruits mixed juice, the fruits juice containing a granule, the drink containing fruit juice, fruits and vegetable mixed juice, vegetable juice, a carbonated drink, a soft drink, a milk beverage, sake, Biel, wine, a cocktail, white distilled liquor, whiskey, etc. are mentioned.

[0019] Moreover, if the raw material and raw material permitted by the constituent for a mood disorders therapy of this invention at a crude drug, a herb, amino acid, a vitamin, a mineral, and other food are

used together, it can **. In here, although especially the crude drug to be used is not limited, a valerian effective in female hormone balance, angelicae radix, paeoniae radix, a peony, a ginseng radix, etc. are fried.

[0020] Although especially a herb is not limited, anis-, the Carrots seed, A clove, coriander, Cypress, a cinnamon, juniper, a ginger, A sweet Orange and pineapple needle, basil, patchouli, a bitter orange, A fennel, black pepper, a bay, peppermint, a bergamot, Mandarin, myrrh, a lemon grass, a rosemary, a grapefruit, SHIDA wood, a citronella, the SAGE, a time, a tee tree, a violet leaf, A vanilla bean, a hyssop, a eucalyptus, a lime, lemon, ylang ylang, a cardamom, The KURARI SAGE, a jasmine, a geranium, a chamomile, Bulgaria Lowe's, Lowe's, olibanum, lavender, chamomillae flos, a geranium, sandalwood NERORI, A verbena, petit grain, Vetiveria zizanioides, marjoram, Melissa, a rosewood, The peppermint which a St. John's wort, St. John's Wort, Piper methysticum, etc. are raised, and has the killing effectiveness and relaxed effectiveness also in them, a bergamot, ylang ylang, a geranium, a chamomile, lavender, St. John's Wort, and Piper methysticum are desirable. Especially as a configuration of these herbs, it is not limited with an extract extract, essential oil, herb tea, etc.

[0021] Although not limited especially in the amino acid to be used, a glutamine, glutamic acid, inosinic acid, an alanine, an arginine, an aspartic acid, threonine, a serine, gamma-aminobutyric acid, a taurine, thiotaurine, a hypotaurine, etc. are raised, for example.

[0022] Although vitamin A, vitamin B1, vitamin B2, vitamin B6, vitamin B12, vitamin C, vitamin D, vitamin E, a vitamin K, a folic acid, a nicotinic acid, a lipoic acid, pantothenic acid, a biotin, ubiquinone, a prostagladin, etc. are raised in the vitamin to be used and the derivative of these vitamins is also contained, they are not these things limited to seeing.

[0023] In the mineral to be used, although calcium, iron, magnesium, copper, zinc, a selenium, a potassium, etc. are raised, it is not limited to these.

[0024] Moreover, in addition, an aloe, royal jelly, Melatonin, PURASENTA, Propolis, isoflavone, a soybean lecithin, yolk lecithin, a yolk oil, Chondroitin, a chocolate liquor, a collagen, vinegar, chlorella, Spirulina, A ginkgo tree leaf, green tea, eucommia ulmoides tea, *****, oolong tea, the leaf of a mulberry, sweet tea, the Banaba tea, Funguses, such as saccharides, such as unsaturated fatty acid and an oligosaccharide, lactobacillus bifidus, and Monascus pilosus, agaricus -- mushrooms, such as a mushroom, princess matsutake, Ganoderma, and maitake mushrooms, and a blueberry -- a prune, a grape, and an olive -- burying -- fruits, such as citrus, a peanut, and an almond -- Seeds, such as Goma and pepper, a green pepper, a red pepper, a Welsh onion, a Japanese pumpkin, a melon, Seaweed, such as greenstuff, such as a ginseng radix, a burdock, mulukhiya, a garlic, a beefsteak plant, a Japanese horseradish, a tomato, *****, a leaf vegetable, a potato, and beans, and wakame seaweed, fish and shellfishes, birds-and-beasts whale meat, cereals, etc. can be used, and these extracts, a desiccation article, a rough refined material, a refined material, a workpiece, a brewing article, etc. can be used further.

[0025] Especially the process of the constituent for a mood disorders therapy of this invention is not limited, and processes of common food and drugs, such as a process which carries out powder mixing of other raw materials to a theanine, a process which melts a theanine and other raw materials and is used as a mixed solution into a solvent and a process which freeze-dries the mixed solution, and a process which carries out spray drying, are applied. Although not limited especially about the theanine content in the constituent in this application, it takes into consideration from the effective intake, and 0.00025% or more is desirable.

[0026] From one-day mg/kg [0.2] weight, the effective intake of the theanine in this invention is 200 mg/kg weight, and is 50mg/kg from 0.5 mg/kg weight preferably. However, since there is individual difference in the class of symptom mentioned previously, and a degree, the range of this invention is not these things limited to seeing.

[0027] It does not limit that a solution, a suspended solid, powder, a solid-state moldings, etc. should just be [especially] the gestalten in which an ingestion is possible as a product gestalt of this invention. More specifically, boiled fish paste, an soybean workpiece, a seasoning, a mousse, jelly, frozen desert, a candy, chocolate, gum, a cracker, a cake, a pan, soup, coffee, cocoa, tea, green tea, juice, a milk

beverage, dairy products, alcohol, a tablet, a capsule, drugs, etc. are illustrated. Next, although an example explains this invention further, this inventions are not these things limited to seeing. Hereafter, although an example and the example of a trial explain this invention to a detail more, this invention is not limited to the example concerned and the example of a trial.

[0028]

[Example] Example 1 30 degrees C of manufacture glutamine 21.9g of a theanine and 28.5g of ethylamine hydrochlorides by enzymatic process were made to react in 0.3U glutaminase (product made from Amano Pharmaceuticals) for 22 hours among 0.05M boric-acid buffer-solution (pH9.5) 0.5L. Subsequently, it is Dowex about reaction mixture. 50x8, Dowex The quality of the specified substance was isolated from reaction mixture by applying to 1x2 (both product made from Muromachi Chemical industry) column chromatography, and carrying out ethanol processing of this.

[0029] The check of L-theanine of the matter concerned covered this isolation matter over an amino acid analyzer and paper chromatography, and was performed by showing the same behavior as the standard substance. When hydrolysis processing was performed by the hydrochloric acid or glutaminase, glutamic acid and ethylamine were produced at a rate of 1:1. Thus, since the isolation matter was hydrolyzed by glutaminase, it is shown that ethylamine had combined at least with gamma of glutamic acid. Moreover, it also checked by the glutamate dehydrogenase that the glutamic acid produced in hydrolysis was L-object. As mentioned above, 8.5g L-theanine was obtained.

[0030] example 2 10kg of extract tea (*Camellia sinensis*) leaves from the tea leaves of a theanine -- hot water -- after an extract and cation exchange resin [Muromachi -- Dowex HCRmade from Chemical industry W-2] -- through and 1N It was eluted by NaOH. an elution fraction -- activated carbon [-- through and the elution fraction by 15% ethanol were condensed using RO film [NTR[by NITTO DENKO CORP.] 729 HF] to regent activated carbon SGmade from Nimura Chemical industry], the column chromatography refined, it recrystallized further, and L-theanine 24.8g was manufactured. In addition, L-theanine [trade name:SANTEANIN and the TAIYO KAGAKU CO., LTD. make] was used for manufacture of the following class products.

[0031] Example 3 It tableted after mixing the raw material shown below as one example of the constituent for a manufacture theanine combination mood disorders therapy of a theanine combination tablet, and the theanine combination tablet was manufactured.

Frosting sugar 71.67 % of the weight (0.5375g)

Trehalose 10 % of the weight (0.075g)

L-theanine 13.33 % of the weight (0.1g)

Sucrose fatty acid ester 1 % of the weight (0.0075g)

Perfume (lemon flavor) 4 % of the weight (0.03g)

Sum total 100 % of the weight (0.75g)

That is, each raw material was mixed according to the above-mentioned combination, and it tableted so that it might be set to 0.75g per grain after granulation.

[0032] Example 1 of a comparison It tableted after mixing manufacture, next the shown raw material of a contrast tablet, and the contrast tablet was manufactured.

Frosting sugar 85 % of the weight (0.6375g)

Trehalose 10 % of the weight (0.075g)

Sucrose fatty acid ester 1 % of the weight (0.0075g)

Perfume (lemon flavor) 4 % of the weight (0.03g)

Sum total 100 % of the weight (0.75g)

That is, each raw material was mixed according to the above-mentioned combination, and it tableted so that it might be set to 0.75g per grain after granulation.

[0033] Example 4 As one example of the constituent for a manufacture theanine combination mood disorders therapy of a theanine combination candy, the theanine combination candy was manufactured using the raw material shown below.

Granulated sugar 64kg starch syrup A 23kgL(s)-theanine 10kg perfume (lemon flavor) A 0.05kg50% tartaric acid 1kg water remaining 10kg of water and starch syrups which heated to 110 degrees C,

dissolving 30kg granulated sugar in 20kg of water, and dissolved L-theanine -- in addition, temperature was raised to 145 degrees C. Fire was added and mixed for the stop and 50% tartaric acid. It cooled to 75-80 degrees C, and fabricated with the shaping roller, and the theanine combination candy was adjusted. In addition, as a result of measuring the content of L-theanine in a candy, the content was 89.6 mg/g in 1.2g per piece.

[0034] Example 5 As one example of the constituent for a manufacture theanine combination mood disorders therapy of a theanine combination blueberry drink, the theanine combination drink was manufactured using the raw material shown below.

Fruit-sugar grape sugar 12kg blueberry concentrated juice 1kg 1 / 5 transparence lemon fruit juice 0.4kg citric-acid Na 0.05kg 50% citric-acid Na (crystal) L-theanine for pH adjustment 0.1kg perfume (blueberry flavor) 0.05kg water Optimum dose whole quantity 100kg fruit-sugar grape sugar, blueberry concentrated juice, 1 / 5 transparence lemon fruit juice, citric-acid Na, and L-theanine were added to water, and the stirring dissolution was carried out. It prepared to pH3.1 using citric-acid Na (crystal) 50%, and after [temperature up] perfume was added to 95 degrees C, and 100ml was filled up, it cooled, and L-theanine combination blueberry drink was manufactured. In addition, as a result of carrying out the quantum of the L-theanine in blueberry juice, contents were 98.3mg / 100ml.

[0035] Example 6 As one example of the constituent for a manufacture theanine combination mood disorders therapy of a theanine combination grapefruit drink, the theanine combination drink was manufactured using the raw material shown below.

Fruit-sugar grape-sugar liquid A 6kg L(s)-theanine 0.1kg ferric pyrophosphate 0.06kg placental extract 100% of 0.01kg grapefruit fruit juice 30kg citric-acid Na Perfume for pH adjustment (grapefruit flavor) 0.05kg water Optimum dose whole quantity 100kg fruit-sugar grape-sugar liquid, L-theanine, a ferric pyrophosphate, placental extract, and 100% of grapefruit fruit juice were added to water, and the stirring dissolution was carried out. To 95 degrees C, it prepared to pH3.1 using citric-acid Na, and it filled up with 100ml at a time, and cooled [after / temperature up / perfume was added and], and L-theanine combination grapefruit drink was manufactured. In addition, as a result of carrying out the quantum of the L-theanine in blueberry juice, contents were 96.4mg / 100ml.

[0036] Example 1 of a trial The mood disorders curative effect trial mood disorders curative effect was performed to 24 NORUMOFORATEMIKKU patients' group. A diagnosis of a patient is DMS. III Slight - seriousness was judged by the criterion of R. The trial was carried out in the double blind and the duration of test was performed for three weeks. 24 patients were divided into two uniform groups, and the contrast tablet with which other groups manufactured the theanine combination tablet which manufactured a group in the example 3 in the example 1 of a comparison was taken. The tablet was caught twice every day on the 1st at 10:00 a.m. and 4:00 p.m. Assessment of a curative effect followed the Hamilton (Hamilton) scale about depression by 31 items. The curative effect was performed before intake on the 7th day of intake, the 14th, and the 21st.

[0037] The average score of the Hamilton scale in intake of the contrast tablet of the example 1 of a comparison and the theanine combination tablet of an example 3 was shown in drawing 1. the group by which the average score of the Hamilton scale took in the theanine combination tablet of an example 3 from 24 before intake -- after three weeks -- the value of 15 -- significant -- having decreased ($p < 0.01$) - - it was not a remarkable reduction although the reduction in a score was accepted on the other hand in the group which took in the contrast tablet of the example 1 of a comparison. In the theanine combination tablet of an example 3, it was suggested that it was effective from the one week back of intake. Moreover, the side effect was not accepted although record was taken also about a certain side effect during the intake period.

[0038] Example 2 of a trial The comparison of a comparison tricyclic antidepressant with a tricyclic antidepressant and a theanine was performed to ten NORUMOFORATEMIKKU patients' group. A diagnosis of a patient is DMS. III Slight - seriousness was judged by the criterion of R. The trial was carried out in the double blind and the duration of test was performed for four weeks. Ten patients were divided into two uniform groups, and 50mg of friend TORIPUCHIN whose other groups are tricyclic antidepressants about the theanine combination tablet which manufactured a group in the example 3 per

was taken day. It was made to catch twice every day on the 1st at 10:00 a.m. and 4:00 p.m. Assessment of a curative effect followed the Hamilton (Hamilton) scale about depression by 31 items. The curative effect was performed before intake on the 28th on the 14th. The side effect other than the Hamilton scale was recorded by the questionnaire.

[0039] The average score of the theanine combination tablet of the example 3 of the example 2 of a trial and the Hamilton scale in friend TORIPUCHIN intake was shown in drawing 2. From 29 before intake, by the group which took in the theanine combination tablet of an example 3, it decreased in number to 23 on the 14th, and the average scores of the Hamilton scale decreased in number to 20 on the 27th. Although it was set to 27 on the other hand on the 14th in the group which took in friend TORIPUCHIN and effectiveness was not accepted so much, it was set to 20 on the 27th and the reduction in a score was accepted. Thus, it was checked that the manifestation of effectiveness of a theanine is early.

[0040] Moreover, the side effect of each test subject in an intake period was shown below.

Theanine combination tablet of an example 3 Patient number Side effect (the 14th day) Side effect (the 28th day)

A Nothing Nothing B Nothing Nothing C Nothing Nothing D Nothing Nothing E Nothing Nothing
Friend TORIPUCHIN Patient number Side effect (the 14th day) Side effect (the 28th day)

F Sleepiness Sleepiness, constipation G Thirst Thirst H Nothing Nothing I Constipation Constipation
Palpitation, constipation Although all the members were not permitted a side effect in the duration of test in the theanine combination tablet of palpitation and the constipation example 3, in friend TORIPUCHIN, four persons were permitted the side effect among five persons.

[0041] Example 3 of a trial The mood disorders therapy trial in the theanine combination candy of the trial example 4 for a mood disorders therapy in theanine combination food, the theanine combination blueberry drink of an example 5, and the theanine combination grapefruit drink of an example 6 was performed. It carried out to nine NORUMOFORATEMIKKU patients' group. A diagnosis of a patient is DMS. III Slight - seriousness was judged by the criterion of R. The duration of test was performed for four weeks. Nine patients are divided into every [trinomial] and the theanine combination candy of an example 4, the theanine combination blueberry drink of an example 5, and the theanine combination grapefruit drink of an example 6 were caught twice every day on the 1st at 10:00 a.m. and 4:00 p.m. Assessment of a curative effect followed the Hamilton (Hamilton) scale about depression by 31 items. The judgment of a curative effect was performed before intake on the 28th.

[0042] Moreover, the score of the Hamilton scale of each test subject in an intake period was shown below.

The theanine combination candy patient number of an example 4 Before intake 28 day A 30 21B 24 19C 26 The theanine combination blueberry drink patient number of 24 examples 5 Before intake 28th day D 38 30E 22 20F 35 The theanine combination grapefruit drink patient number of 33 examples 6 Before intake 28th day D 38 30E 2220F The mood disorders curative effect was accepted also in 35 33 theanine combination food.

[0043]

[Effect of the Invention] As explained above, great effectiveness having this invention article in striking control of mood disorders, and using this invention article also considers and combines effectiveness and the point of safety, and it is very useful.

[0044]

[Translation done.]

NOTICES *

JPO and NCIPi are not responsible for any damages caused by the use of this translation.

1. This document has been translated by computer. So the translation may not reflect the original precisely.
2. **** shows the word which can not be translated.
3. In the drawings, any words are not translated.

CLAIMS

[Claim(s)]

[Claim 1] The constituent for a mood disorders therapy characterized by containing a theanine [claim 2] Food and drugs [claim 3] containing the constituent for a mood disorders therapy characterized by containing a theanine according to claim 1 The manufacture approach of of the food and drugs containing the constituent for a mood disorders therapy characterized by containing a theanine according to claim 1

[Translation done.]